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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,635	09/18/2003	Mitsuhiro Nakamura	FUJY 20.628	5071
26304 7590 06/27/2007 KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585			EXAMINER HOANG, HIEU T	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 06/27/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/664,635	<b>Applicant(s)</b> NAKAMURA, MITSUHIRO	
	<b>Examiner</b> Hieu T. Hoang	<b>Art Unit</b> 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413) .<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                         |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/18/06, 09/18/03</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This office action is in response to the communication filed on 09/18/2003.
2. Claims 1-10 are pending and presented for examination.

### ***Drawings***

3. Figure 25 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-10 are rejected under 35 U.S.C. 102(a) as being anticipated by Pan et al. (Processing Overhead Studies in Resource Reservation Protocols, September 24-28, 2001, [http://www1.cs.columbia.edu/~pingpan/paper\\_list.html](http://www1.cs.columbia.edu/~pingpan/paper_list.html), Papers section).

6. For claim 1, Pan discloses a resource management method for managing resources in a label switching network, comprising:

- retaining a bandwidth of an on-reservation session and a bandwidth of an on-communication session (section 4, par. 2, fig. 6, sender establishes a reservation by sending flowspec to all receivers, each router along the way attempts to perform a resource reservation upon the reception of the flowspec or based on traffics statistics and timing information provided in the messages, if a resource reservation is successful the resource (bandwidth) is retained for that flow or session); and
- executing periodical re-setting of a path with respect to the bandwidth occupied by the on-reservation session (section 2.4, lines 5-13, page 5, if...else, if a resource reservation attempt is failed (not available bandwidth to fulfill a reservation request), retry resource reservation at each refresh cycle).

7. For claim 2, Pan further discloses recording a failure count, for a fixed period, of a link causing a failure in a reservation request in a previous period; and fluctuating a weight of the link that tends to cause the failure on the basis of a history of the failure

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count (page 4, last 3 lines, suspend misbehaving flows, flows that have failed their end-to-end reservation attempt too many times are ignored by routers, leaving resources for other flows, meaning the weight of a flow (priority of the flow) is changed according to its reservation failure counts).

8. For claim 3, Pan further discloses fluctuating a re-setting period of the path in accordance with the reservation request failure count (page 5, par. 2, page 8, table 1, retry interval is based on number of reservation request failure count).

9. For claim 4, Pan discloses a reservation path optimization system for optimizing a reservation path between specified nodes configuring a network, comprising:

- a reservation path setting module for setting the reservation path and a bandwidth for establishing a predetermined session between specified nodes (section 4, par. 2, fig. 6, sender establishes a reservation by sending flowspec to all receivers, each router along the way attempts to perform a resource reservation upon the reception of the flowspec or based on traffic statistics and timing information provided in the messages, if a resource reservation is successful the resource (bandwidth) is retained for that flow or session); and
- a reservation path re-setting module for periodically re-setting the reservation path on the basis of the bandwidth set by said reservation path setting module (section 2.4, lines 5-13, if a resource reservation attempt is failed, retry resource reservation at each refresh cycle).

10. For claim 5, Pan discloses a reservation path optimization system for optimizing a reservation path between specified nodes configuring a label switching network, comprising:

- a reservation path setting module for setting the reservation path and a bandwidth for establishing a predetermined session between specified nodes (section 4, par. 2, fig. 6, sender establishes a reservation by sending flowspec to all receivers, each router along the way attempts to perform a resource reservation upon the reception of the flowspec or based on traffics statistics and timing information provided in the messages, if a resource reservation is successful the resource (bandwidth) is retained for that flow or session); and
- a reservation path re-setting module for re-setting the reservation path set by said reservation path setting module (section 2.4, lines 5-13, if a resource reservation attempt is failed, retry resource reservation at each refresh cycle).

11. For claim 6, Pan further discloses the reservation path re-setting module periodically re-sets the reservation path on the basis of the bandwidth set by said reservation path setting module (section 2.4, page 5, if...else statement, if available bandwidth is more than requested bandwidth, reserve the session, else, lines 5-13, if a resource reservation attempt is failed, retry resource reservation at each refresh cycle).

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12. For claim 7, Pan further discloses the reservation path re-setting module periodically re-sets the reservation path on the basis of specified algorithm (page 5, reset based on number of failure retries).
13. For claim 8, Pan further discloses a module for fluctuating the period (section 2.4, par. 3, retry period is not necessarily fixed).
14. For claim 10, Pan discloses a reservation path optimization method for optimizing a reservation path between specified nodes configuring a network, comprising:
- setting the reservation path and a bandwidth for establishing a predetermined session between specified nodes (section 4, par. 2, fig. 6, sender establishes a reservation by sending flowspec to all receivers, each router along the way attempts to perform a resource reservation upon the reception of the flowspec or based on traffics statistics and timing information provided in the messages, if a resource reservation is successful the resource (bandwidth) is retained for that flow or session); and
  - periodically re-setting the reservation path on the basis of the bandwidth set by said reservation path setting (section 2.4, lines 5-13, page 5, if a resource reservation attempt is failed (not available bandwidth to fulfill a reservation request), retry resource reservation at each refresh cycle).

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pan as applied to claim 4 above, and further in view of Ashwood-Smith et al. (Generalized MPLS Signaling – RSVP-TE Extensions, October 2001)

17. For claim 9, Pan discloses the invention as in claim 4. Pan does not explicitly disclose the label switching network is an MPLS network, and the reservation path is Label Switched Path.

However, Ashwood-Smith discloses the same (abstract, a generalized MPLS signaling scheme with resource reservation extension)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Pan and Ashwood-Smith to employ resource reservation retry method of Pan to a MPLS scheme.



***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Sharma et al. US 2002/0093961. Circuit establishment and tear down.
- Ishibashi et al. US 2003/0147352. Path establishment method.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

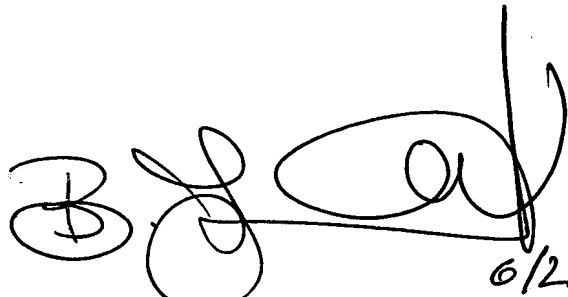
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HH

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6/22/7  
BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER